WE CLAIM:

1. A portable instrument for projecting a bit-mapped image in a display mode of operation, and for selectively electro-optically reading indicia in a reading mode of operation, comprising:

a) a housing;

b) an electro-optical assembly supported by the housing, for reading the indicia during the reading mode, and for projecting the bit-mapped image on a viewing surface during the display mode; and

c) a mode selector for selecting one of the modes.

2. The instrument of claim 1, wherein the housing has a size and a shape configured to be held in a user's hand during both the display and reading modes.

3. The instrument of claim 1, wherein the assembly includes a reader having a light source for generating a light beam, a light sensor having a field of view and operative for detecting light from the indicia, and a scanner for scanning at least one of the light beam and the field of view.

4. The instrument of claim 3, wherein the indicia is a coded, machine-readable symbol over which said at least one of the light beam and the field of view is scanned, and wherein the sensor is operative for generating an electrical signal corresponding to the symbol, and wherein the reader includes a signal processor for processing the signal to data indicative of the symbol.

5. The instrument of claim 3, wherein the indicia is a human-readable, two-dimensional representation over which said at least one of the light beam and the field of view is scanned, and wherein the sensor is operative for generating an electrical signal corresponding to the

representation, and wherein the reader includes a signal processor for processing the signal to data indicative of the representation.

6. The instrument of claim 1, wherein the assembly includes a reader having a capture device having a field of view over which the indicia is captured.

7. The instrument of claim 1, wherein the assembly includes a light source for generating a light beam, and a scanner for sweeping the light beam in a raster pattern of scanning lines that cover an area of the viewing surface, and wherein the assembly includes a controller for pulsing the light source on and off while the light beam is swept over each of the scanning lines.

8. The instrument of claim 7, wherein the scanner includes a first scan mirror for sweeping the light beam along a first direction, and a second scan mirror for sweeping the light beam along a second direction generally orthogonal to the first direction.

9. The instrument of claim 7, wherein the housing includes a window through which the light beam and the bit-mapped image pass.

10. The instrument of claim 1, wherein the mode selector is a switch on the housing, and actuatable between reading and display states that respectively correspond to the reading and display modes.

11. The instrument of claim 1, wherein the housing is elongated and extends along an axis between opposite end regions, and wherein a window is located at one of the end regions, and wherein the bit-mapped image is projected through the window.

12. The instrument of claim 3, wherein the light source is a laser for generating the light beam as a visible laser beam.

13. The instrument of claim 7, wherein the controller projects the image as alphanumeric characters.

14. A method of projecting a bit-mapped image in a display mode of operation, and of selectively electro-optically reading indicia in a reading mode of operation, comprising the steps of:

a) manually selecting the reading mode on a portable instrument for reading the indicia; and

b) manually selecting the display mode on the portable instrument for projecting the bit-mapped image on a viewing surface.

15. The method of claim 14, wherein the selecting steps are performed by manually actuating a mode selector on the instrument.

16. An electro-optical assembly for projecting a bit-mapped image in a display mode of operation, comprising:

a) a light source for generating a light beam;

b) a scanner for sweeping the light beam in a raster pattern of scanning lines that cover an area of a viewing surface, and

c) a controller for pulsing the light source on and off while the light beam is swept over each of the scanning lines.

17. The assembly of claim 16, wherein the scanner includes a first scan mirror for sweeping the light beam along a first direction, and a second scan mirror for sweeping the light beam along a second direction generally orthogonal to the first direction.